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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,491	10/29/2003	Jeffrey M. Sieracki	1023-228US01	5730

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EXAMINER	
NGUYEN, PHU K	
ART UNIT	**PAPER NUMBER**
2628	
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07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/696,491	SIERACKI ET AL.	
	Examiner	Art Unit	
	Phu K. Nguyen	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-19,21-32,34-44,46,48-56,58-65,67,68,70 and 71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-19,21-32,34-44,46,48-56,58-65,67-68,70-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Phu Nguyen

PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4, 21-23, 26-27, 29, 43-46, 50, 51, 53, 67-68, 70-71 are rejected under 35 U.S.C. 102(b) as being anticipated by NORTH et al. (Patient-Interactive, Microprocessor-Controlled Neurological Stimulation System) in view of Chen et al. (5,588,098).

As per claim 1, North teaches the claimed "method comprising "sequentially displaying a plurality of two-dimensional body templates, each of the body templates illustrating a view of an external surface of a human body rotated an angle about an axis" (North, figure 3, page 189); "receiving input from a user indicating a region of one of the body template" (North, page 187, columns 1-2, the interactive input of the user; figure 2), "regenerating the body template to illustrate the indicated region on the template; and displaying the regenerated body template" (North, figure 3).

Claim 2 adds into claim 1 "wherein the plurality of body templates comprises a front view template and a back view template" (North, figure 3).

Claim 4 adds into claim 1 "wherein the regenerated body is a first one of the body templates that illustrates a portion of the surface, and generating a second one of the body template to illustrate at least some of the portion of the surface illustrated by the

first one of the body templates and at least a portion of the region indicated by the user, and displaying the second one of the body templates" (North, the front and back views of a human body; page 189).

Claim 21 adds into claim 1 "wherein regenerating the one of the body templates to illustrate the indicated region on the template comprises regenerating the one of the body templates to include shading of the indicated region on the template" (North, figure 3, page 189).

Claim 22 adds into claim 1 "wherein the body region indication indicates a region of at least one of pain or paresthesia experienced by a patient" (North, figure 3, page 189).

Claim 23 adds into claim 1 "wherein the user comprises one of a patient or a clinician" (North, Introduction, page 185).

Claims 26-27, 29, 43-44, 46, 50, 51, 53, 67-68, 70-71 claim a computer readable medium and a system to perform the steps of methods in claims 1-2, 4, 21-23; therefore, they are rejected under a similar reason.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-7, 9-19, 24-25, 28-32, 34-42, 46, 48-49, 52, 54-56, 58-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over NORTH et al. (Patient-Interactive, Microprocessor-Controlled Neurological Stimulation System) in view of Chen et al. (5,588,098).

Claim 3 adds into claim 1 "wherein the plurality of body templates comprises a front view template, a right-side view template, a back view template, and a left-side view template" which North does not teach. However, given a 3D object on a display, it would have been obvious to interactively display the object at any rotation angle (Chen, figure 4 shows the manipulation tool including a rotating operation). It would have been obvious in view of Chen to display the object on right-side, left-side views because the selection of a desired angle yields a clear and unobstructed view.

Claim 5 adds into claim 1 "wherein sequentially displaying the body templates comprises sequentially displaying the body templates according to commands received from a user" which North does not teach. However, given a 3D object on a display, it would have been obvious to interactively display the object at any rotation angle (Chen,

figure 4 shows the manipulation tool including a rotating operation initiated by a user). It would have been obvious in view of Chen to display the object on different views through a user's control because the selection of a desired angle yields a clear and unobstructed view.

Claim 6 adds into claim 5 "wherein sequentially displaying the body templates according to commands received from a user comprises displaying the body templates according to commands received via at least one direction arrow" (Chen, figure 4).

Claim 7 adds into claim 5 "displaying a first one of body templates; receiving a command from the user; generating a second one of the body templates according to the command; and displaying the second one of the body templates" (North, figure 3; Chen, figure 10; the sequence of manipulated object).

Claim 9 adds into claim 1 "sequentially displaying the body templates comprises sequentially displaying the body templates via a display, and receiving input from a user comprises receiving input from the user via the display" (North, figure 3; Chen, figure 10; the sequence of manipulated object).

Claim 10 adds into claim 1 "wherein sequentially displaying the body templates comprises: displaying a first one of the body templates; generating a second one of the

body templates to illustrate a view of the external surface of the human body, wherein the angle of rotation of the surface about the axis is based on the proximity of the received body region indication to an edge of the first one of the body templates; and displaying the second one of the body templates" (Chen, column 5, line 41 to column 6, line 56).

Claim 11 adds into claim 1 "the input comprises a two-dimensional polygon outline of the indicated region" (Chen, figure 18).

Claim 12 adds into claim 1 "mapping the input to a body surface coordinate system that describes the external surface of the human body" (Chen, column 8, line 31 to column 10, line 36).

Claim 13 adds into claim 12 "generating each of the body templates based on the body surface coordinate system" (Chen, column 8, lines 49-58).

Claim 14 adds into claim 12 "the body surface coordinate system comprises a three-dimensional coordinate system" (Chen, column 8, lines 49-52).

Claim 15 adds into claim 14 "generating the three-dimensional coordinate system by applying one of a linear interpolation, a higher-order interpolation, or a spline technique to determine valid body coordinates" which would have been obvious in view

of Chen's 3D object display in figure 9 (official notice).

Claim 16 adds into claim 14 "mapping the input into a three-dimensional body surface coordinate system comprises assigning a third coordinate to each point of the indicated region of the body template" (Chen, figure 4).

Claim 17 adds into claim 12 "wherein the body surface coordinate system comprises a two-dimensional coordinate system" (Chen, column 4, lines 54-61).

Claim 18 adds into claim 17 "generating the two-dimensional coordinate system by mathematically peeling and flattening a representation of the external surface of the human body, and indicating continuity at edges of the body surface" whoich would have been obvious for outline or wire display of a 3D object (official notice).

Claim 19 adds into claim 17 "displaying the regenerated body template comprises projecting the two-dimensional coordinate system onto a three-dimensional frame representation of the external surface of the human body" (North, figures 2-3).

Claim 24 adds into claim 1 "wherein the axis comprises a vertical axis through a center of the human body" (Chen, figure 16).

Claim 25 adds into claim 1 "wherein each of the body templates illustrates a view of the external surface of the human body rotated an angle about at least one of a plurality of axes" (Chen, figure 4).

Claims 28-32, 34-42, 46, 48-49, 52, 54-56, 58-66 claim a computer readable medium and a device to implement the method of claims 3-7, 9-19, 24-25; therefore, they are rejected under the same reason.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272 7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu K. Nguyen
July 3, 2007

PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2300